

WHAT IS CLAIMED IS:

1. A polishing apparatus, comprising:  
an upper wheel for pressing at least one workpiece to be polished;  
a lower wheel for supporting the at least one workpiece;  
displacement-detection means, joined to the upper wheel to move together therewith, for detecting relative displacement between the upper wheel and the lower wheel; and  
a reference table arranged at a position opposing the displacement-detection means and integrally fixed to the lower wheel, the reference table providing a displacement-detection reference position,  
wherein the at least one workpiece is polished by a relative difference in speeds between the at least one workpiece and at least one of the lower wheel and the upper wheel.
2. The polishing apparatus according to Claim 1, wherein the displacement-detection means is of a contact-type comprising a probe which abuts against the reference table.
3. The polishing apparatus according to Claim 1, wherein the displacement-detection means is of a non-contact-type comprising a light emitting and receiving unit for emitting light to and receiving light from the reference table, respectively.